

IN THE SPECIFICATION

Please replace paragraph [0033] with the following rewritten paragraph:

[0033] A lower doped semiconductor layer 308, which may also be a nitride-based semiconductor such as gallium nitride or a gallium nitride-based semiconductor, is formed atop at least atop part of the highly doped layer 306. The lower doped layer 308 is typically grown epitaxially using methods such as the reactive sputtering, MOCVD, MBE or atomic layer epitaxy methods described above. When the lower doped layer is a nitride-based semiconductor, the layer is preferably n-type and preferably has a doping concentration of between  $0.75\text{E}16$  and  $1.4\text{E}16\text{ cm}^{-3}$ . Modulation doping may be employed to form such a nitride-based semiconductor layer to attain such low doping levels in a repeatable and uniform manner, such as is described in U.S. Patent Application No.                      (~~Emcore 3.0-084~~) 10/780,526, filed                      February 17, 2004, the disclosure of which is incorporated herein by reference.